

AOPC Role in Requesting NCDC GCOS Activities

Tom Peterson



1

NOAA's National Climatic Data Center

NCDC GCOS Review Meeting
Asheville, NC August 22, 2006



GCOS has Three Science Panels:

- Ocean Observations Panel for Climate (OOPC)
- Terrestrial Observation Panel for Climate (TOPC)
- And the Atmosphere Observation Panel for Climate (AOPC)



AOPC Membership and Expertise

- Chair and Reanalysis Expertise:
 - Dr Adrian SIMMONS
ECMWF
 - Adrian replaced Mike Manton (Australia) as chair a few months ago



Atmospheric In Situ Expertise

- **Dr Philip JONES**
Climatic Research Unit
University of East Anglia
- **Mr David PARKER**
Hadley Centre, UK Met Office
- **Dr Thomas C. PETERSON**
National Climatic Data Center, NOAA
- **Dr Bruno RUDOLF**
Global precipitation Climatology Centre
Deutscher Wetterdienst
- **Mr Kazutoshi ONOGI**
Japan Meteorological Agency



Ocean Observations Expertise

- Dr D.E. (Ed) HARRISON
Pacific Marine Environmental
Laboratory, NOAA



Satellite Expertise

- **Dr Phillip ARKIN**
Earth System Science Interdisciplinary Centre
(ESSIC)
University of Maryland
- **Dr Mitchell D. GOLDBERG**
Office of Research & Applications
NOAA/NESDIS
- **Dr Johannes SCHMETZ**
Meteorological Division
EUMETSAT
- **Dr Makoto SUZUKI**
Data Application Group, Earth Observation Research
Center, Japan



AOPC Primary Responsibilities

- The primary responsibilities of the AOPC are **to identify the needs** for observations in the areas of meteorology and atmospheric chemistry and **to facilitate the establishment or enhancement of networks to obtain them**. Toward this end, it has defined two networks as sub-systems of the WWW Global Observing System. The GCOS Upper-Air Network ([GUAN](#)) . . . the GCOS Surface Network ([GSN](#)). Also recently made the . . . The Baseline Surface Radiation Network ([BSRN](#)) . . . The WMO/[GAW](#) Global Atmospheric CO₂ and CH₄ Monitoring Network . . . GCOS networks.



AOPC Terms of Reference

- To **liaise** with relevant research, operational and end-user bodies (e.g. WWW, GAW) to **determine the requirements** for data to monitor, understand and predict the dynamical, physical and chemical state of the atmosphere and its interfaces on seasonal to multi-decadal timescales;
- To **formulate and promote** an **overall system** to provide long-term systematic data and information to meet those requirements;
- To **determine the current state** of the atmospheric component of the global observing system for climate;
- To **identify gaps and inadequacies** in the atmospheric component of the global observing system for climate;
- To **propose and promote** new systems, or enhancements to current systems and practices, to remove deficiencies;
- To **identify opportunities** for the transfer of research observing systems to operational networks, and to promote such transfers;
- To **liaise** with other GCOS panels and WCRP steering groups on climate observing system matters;
- To **report** regularly to the GCOS Steering Committee and the JSC for WCRP.



Ergo, the AOPC

- Advises on ways to improve the GSN and GUAN networks
- Encourages the GCOS Monitoring, Analysis, Archive and Lead Centers to undertake specific activities



The NCDC/AOPC Interaction

- Every April at the AOPC annual meetings, I report to the AOPC on NCDC's GCOS Centers accomplishments.
- Afterwards I communicate the AOPC recommendations and requests to the appropriate people and try to get the requests addressed
 - Some requests are successfully executed
 - Some are not
 - But No's are fairly rare
 - Because the requests make sense



The Biggest Problem

- While there are few No's some Yes answers don't actually get done
 - Data sets get delayed
 - Some GCOS related work is important but not urgent
 - So other work that is urgent delays the GCOS related activity
 - Such is the reality of NCDC and most other work places



The Biggest Successes

- NCDC's CBS GCOS Lead Center duties are considered important obligations and part of our mission
 - So we persevere
 - Tasks sometimes move around until they find a person who is good at that task and makes time to accomplish it
 - Some of these successes will become clear as the day progresses







In April 2001 I told the AOPC: NCDC's Global Daily

- To contribute to GSN
 - Special stations where requested (e.g., South Africa)
 - QC and homogeneity assessments
 - But the Global Daily project is not as far along as it needs to be
 - E.g., the QC still being improved, etc.



In April 2004 I told the AOPC: Making GSN Data Available

- Integrated with NCDC's standard Customer Service via GDCN
- Still planned
- Delayed due to the delay in GDCN
- Estimated completion: September 2004.



In April 2006 I told the AOPC: Making GSN Data Available

- New approach coming shortly
 - Unfortunately, promised each of the last few years
- Subset of GHCN-Daily
 - Waiting on new QC and reformatting
 - Ready by end of May (Russ Vose)
- Incorporated in NCDC Customer Service system
 - With in one month of reformatting (Neal Lott)
 - Will be able to download whole GSN or a subset of GSN

